

segmenting each message into a plurality of fixed length slots, each of which slots includes a header field and a message segment,

providing a source identifier field in the header field of each slot, said source identifier field including a source identifier code that is uniquely associated with the message to be transmitted,

providing a type field in the header of each slot,

coding into the type field, a code selected from a first code, a second code, and a third code, respectively representing a beginning of a message, a continuation of a message, and an end of a message,

transmitting the slots on the network, and

controlling the reassembly of received slots at the destination in accordance with said source identifier code, the first code, the second code, and the third code.

Please amend claim 17 to read as follows.

17. (Amended) A method as claimed in claim 15, further comprising

transmitting a destination address field in the message segment of the first slot of the message, and

checking a destination address field associated with the message, for a match with an address associated with the destination.

Please amend claim 28 to read as follows.

F3 28. (Amended) A method for the connection-oriented transfer of variable-length messages in fixed-length slots from a source node having a source address to a destination node having a destination address, the method comprising:

segmenting each message into a plurality of fixed-length slots including a first slot, continuing slots and a last slot, each of the slots including a header field and a message segment;
providing, in the header field of each of the slots, a source identifier code associated with the message,

providing a type field for holding a code in the header of each slot,
coding into the type field, a code selected from a first code, a second code, and a third code, respectively representing a beginning of a message, a continuation of a message, and an end of a message,

transmitting the slots from the source node; and
controlling reassembly of the message on the basis of information in the header field of slots received at the destination node.

Please amend claim 33 to read as follows.

F4 33. (Amended) An apparatus for the connection-oriented transfer of variable-length messages in fixed-length slots from a source node, having a source address, to a destination node, having a destination address, the apparatus comprising:

a segmentation machine for segmenting each message into a plurality of fixed-length slots including a first slot, continuing slots, and a last slot, each of the fixed-length slots

including a header field, and a message segment, the segmentation machine being located, in use, at the source node;

a coder for providing, in the header field of each slot,

a source identifier field for holding a source identifier code associated with the message to be transmitted, and

a type field, for holding a code selected from a first code, a second code, and a third code, respectively representing a beginning of a message, a continuation of a message, and an end of a message, and

a reassembly machine for controlling reassembly of slots into the message in accordance with information in the header field, the reassembly machine being located, in use, at the destination node.

Please amend claim 52 to read as follows.

52. (Amended) The apparatus of claim 33 in which the coder provides, in respective header fields of slots associated with a message, each of the first code, the second code, and the third code.

Please amend claim 57 to read as follows.

57. (Amended) A method for connection-oriented transfer of variable-length messages in fixed-length slots via a source node and a destination node from a source having a source address to a destination having a destination address, the method comprising:

segmenting each message into a plurality of fixed-length slots including a first slot, continuing slots and a last slot, each of the slots including a header field and a message segment;

providing, in the header field of each of the slots, a source identifier code associated with the message.

providing a type field in the header of each slot for holding a code,

coding into the type field a code for distinguishing a last slot from prior slots;

transmitting the slots from the source node; and

controlling reassembly of the message in accordance with information in the header fields of slots received at the destination node.

[Please amend claim 58 to read as follows.]

58. (Amended) An apparatus for connection-oriented transfer of variable-length messages in fixed-length slots via a source node and a destination node from a source having a source address, to a destination having a destination address, the apparatus comprising:

a segmentation machine for segmenting each message into a plurality of fixed-length slots including a first slot, continuing slots, and a last slot, each of the fixed-length slots including a header field, and a message segment, the segmentation machine being located, in use, at the source node;

a coder for providing, in the header field of each slot,

a source identifier field for holding a source identifier code associated with the message to be transmitted, and

a type field, for holding a code for distinguishing a last slot from previous slots; and

a reassembly machine for controlling reassembly of slots into the message in accordance with information in the header fields of slots received at the reassembly machine, the reassembly machine being located, in use, at the destination node.